SONY

3-753-098-21 (3)

Stereo Component System

Operating Instructions

SEN-211
HST-211

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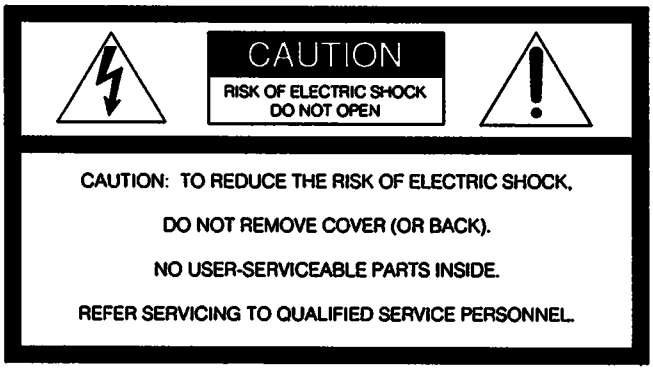
Owner's Record

The model and serial numbers are located at the rear. Record the these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

* The graphical symbols are on the rear enclosure.

Note to CATV system installer
This reminder is provided to call the CATV system installer's attention to Articale 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

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Precautions

On safety
- Operate the unit only on 120 V AC, 60 Hz.
- Should any solid object or liquid fall into the unit, unplug it and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.

On installation
- Place the unit on a level surface.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Good air circulation is essential to prevent internal heat buildup in the unit. Place the unit in a location with adequate air circulation. Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.

On cleaning the cabinet
Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking
Do not throw away the carton and the packing material. It makes an ideal container to transport the unit in.

If you have any question or problem concerning your unit, please consult your nearest Sony dealer.

For detailed precautions, see the leaflet "IMPORTANT SAFEGUARD".

Adjusting the Audio

The following operations apply only to reproduced sound.

Volume Adjustment

To increase the sound level, turn the VOLUME clockwise. To decrease it , turn the control counterclockwise.

Note
When listening with headphone connected to the HEADPHONES jack, no sound can be heard from the speaker system.

Sound Quality Adjustment

To adjust tone quality
Adjust the 5-BAND STEREO GRAPHIC EQUALIZER controls according to:
- Personal preference
- The room acoustics. For instance, playback in a room with padded walls or furniture will probably sound better with the high frequencies boosted.
- Program quality. If reproduction contains hiss, cutting the higher frequencies will improve playback.

Function of the graphic equalizer controls
100 Hz: Boosts or cuts bass.
330 Hz: Adjusts the power, spaciousness and warmth of the sound.
1 kHz: Provides more presence for vocals.
3.3 kHz: Boosts a brighter sound or reduces stridency.
10 kHz: Highlights the delicate quality of instrumental sound.

Balance Adjustment

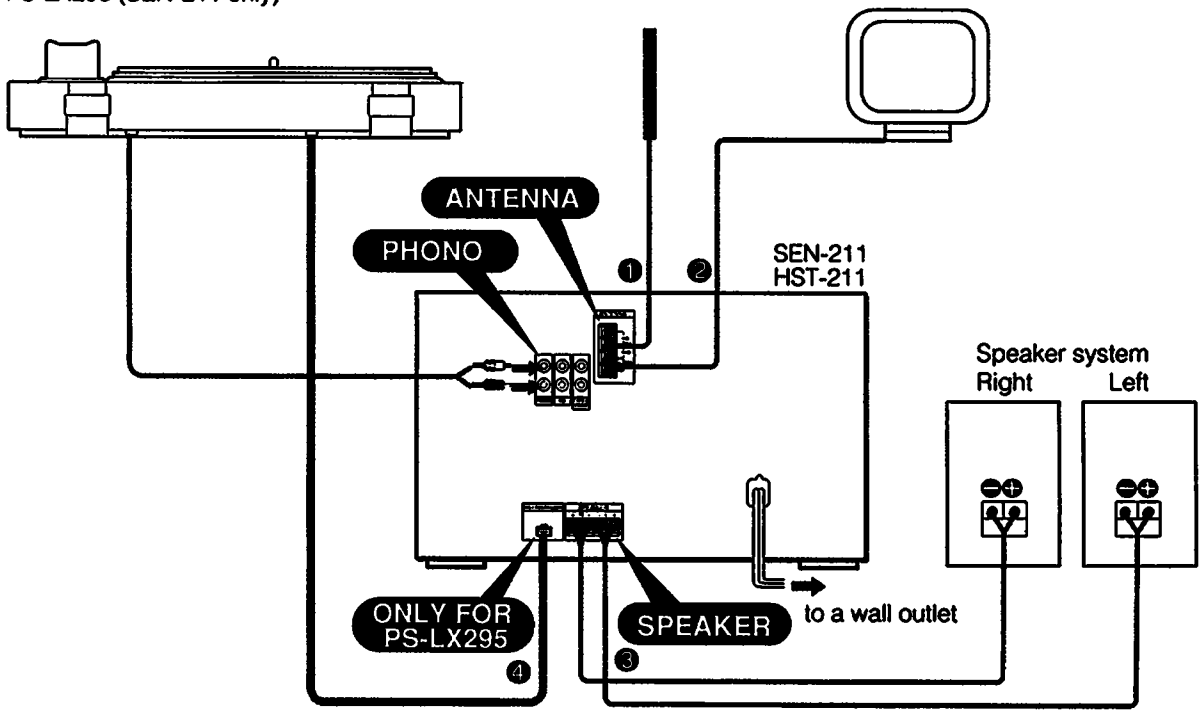
To change relative strength of the right and left speaker outputs, adjust the BALANCE control.

For personal listening
Connect headphone to the HEADPHONES jack.

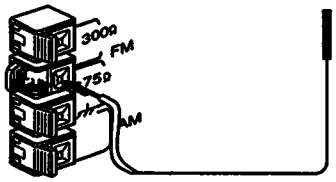
Connections

Connect the AC power cord last. Make sure power is off.
Cord plugs and jacks are color coded. Red plugs and jacks are for right channel (R) and white ones for the left channel (L).
The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and noise.
Keep speaker cords, connecting cords and power cords away from the AM loop antenna and the tuner's antenna lead-in to avoid possible noise pickup.

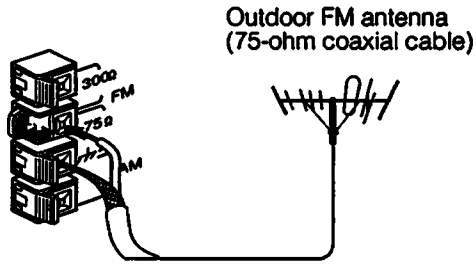
PS-LX295 (SEN-211 only)



❶ FM wire antenna (supplied)

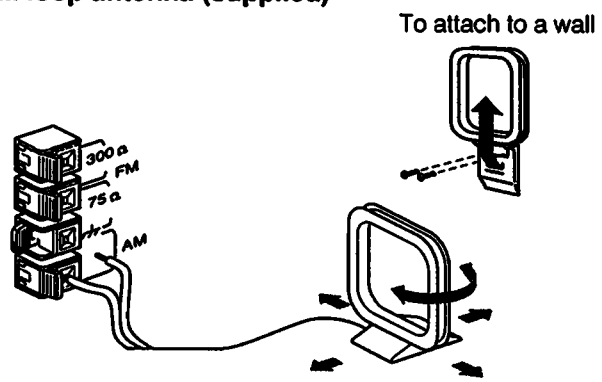


For better FM reception

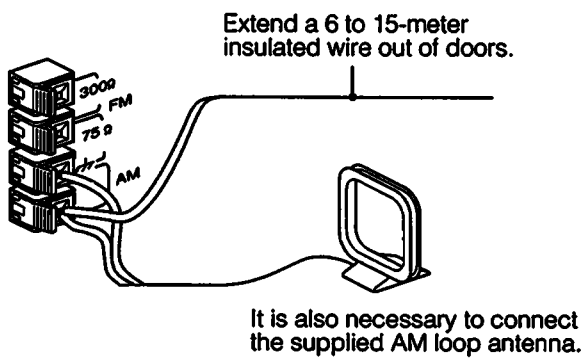


CAUTION
Do not put anything like another unit to obstruct the ventilation holes on the top of the unit.
The level surface installation is required for essential air ventilation to prevent internal heat built up in the unit.

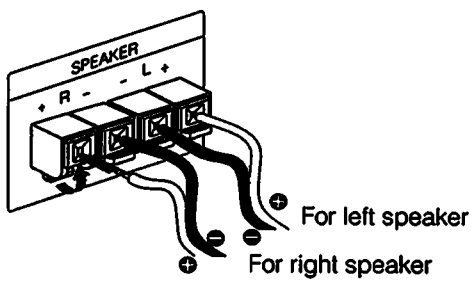
❷ AM loop antenna (supplied)



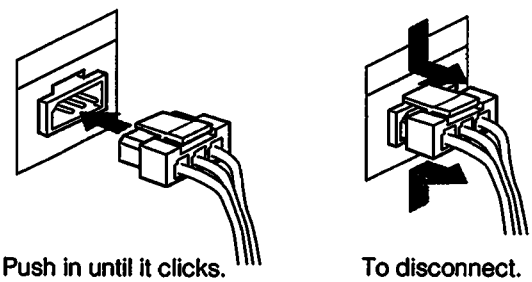
For better AM reception


Extend a 6 to 15-meter insulated wire out of doors.
300Ω
FM
75Ω
AM
It is also necessary to connect the supplied AM loop antenna.

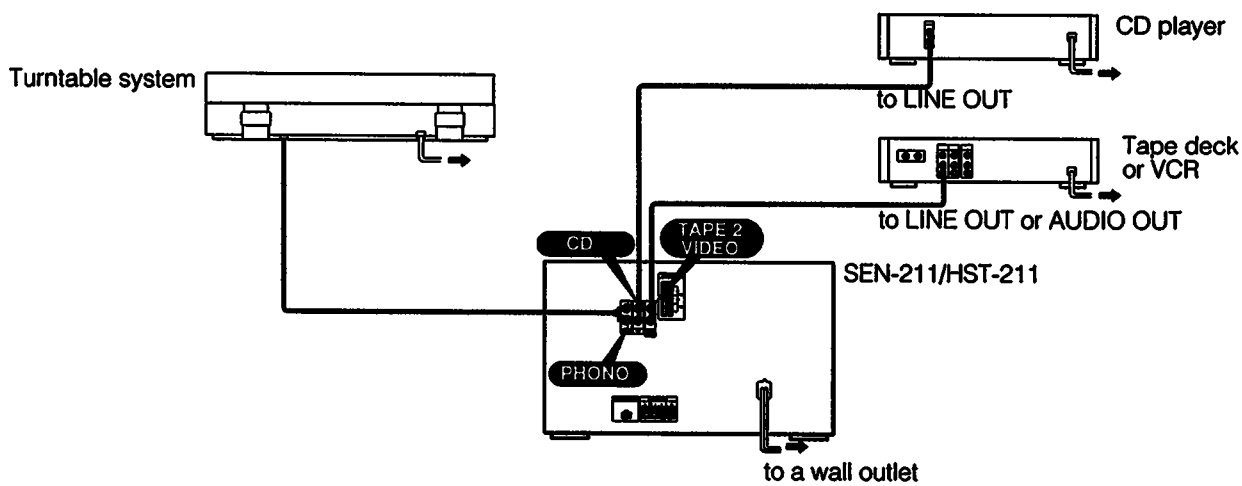
❸ Speaker cords



❹ Flat remote control cord (only for PS-LX295)



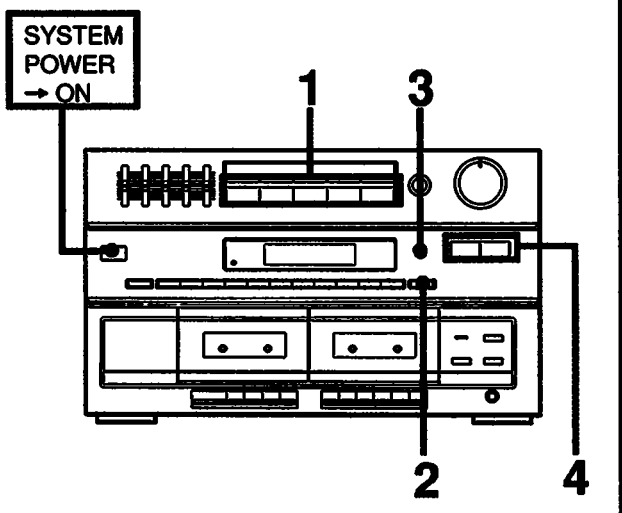
Adding Other Components to Your System



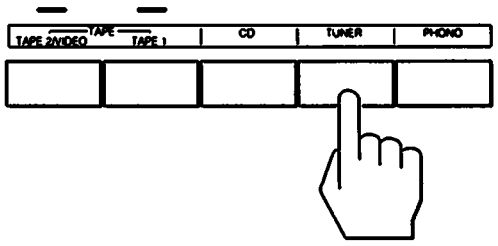
Receiving Broadcast

Tuning in Automatically

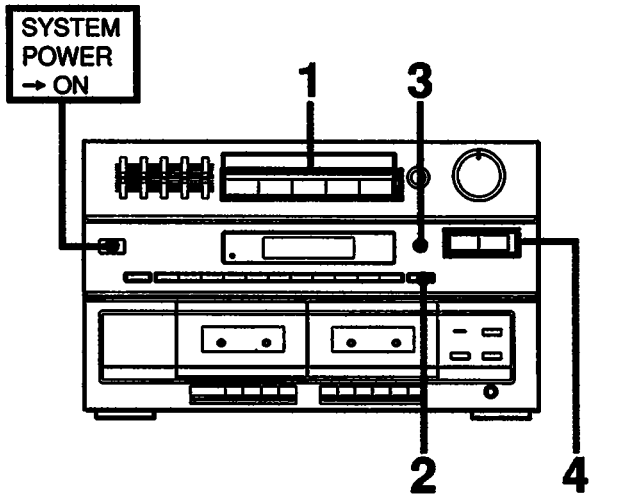
Before reception, be sure to connect the supplied AM and FM antenna.



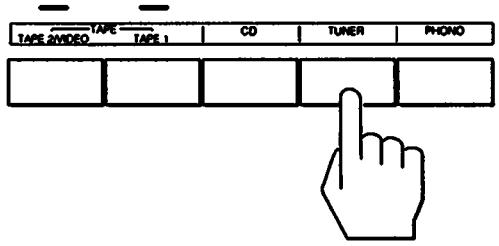
1



Tuning in Manually



1



To change the AM tuning interval

The AM tuning interval is preset at the factory to 10 kHz to match the frequency allocation system of your country.
To change the interval to 9 kHz, proceed as follows.

1 Press the SYSTEM POWER switch to turn on the unit.
2 Set the BAND FM/AM selector to AM.
3 Disconnect the AC plug from the AC outlet to turn off the unit.
4 While pressing the "+" TUNING button, connect the AC plug to the AC outlet again to turn on the unit.

To reset the interval to 10 kHz, follow the same procedure.

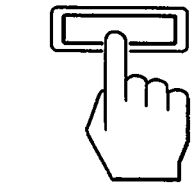
Note

When the interval is changed, all stored stations will be erased from the memory. After changing the interval, be sure to store the stations again.

For details on operation, refer to "More information" below.

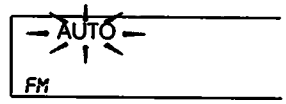
2 Select the band.

BAND FM/AM

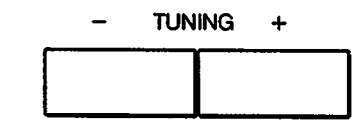


3 Select automatic tuning.

AUTO TUNING



4 Select the station.

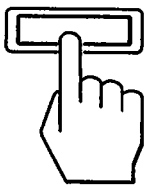


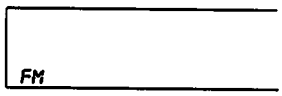
For a lower frequency.

For a highe frequency.

2 Select the band.

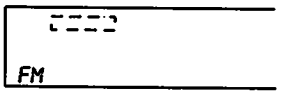
BAND FM/AM



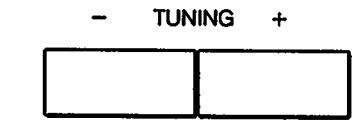


3 Release automatic tuning.

AUTO TUNING



4 Select the station.



For a lower frequency.

For a higher frequency.

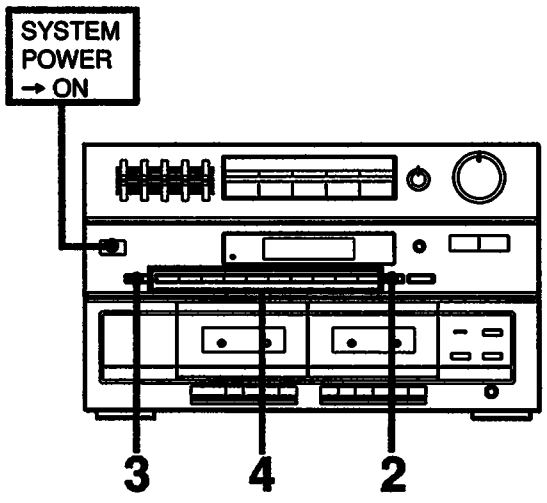
More information on tuning in automatically

Indicators in the display window

- "TUNED" appears when a stations tuned in.
- "STEREO" appears when an FM stereo program of sufficient signal strength is received.

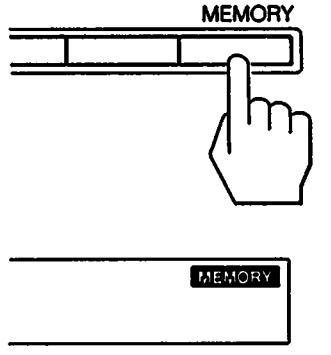
Receiving Broadcasts

Storing Station Frequencies into Memory



1 Tune in a desired station.

2



Tuning into a Stored Station Directly

Press SHIFT and the numeric button for the desired code.

More information on storing stations

How many stations can be stored ?
Up to 10 stations can be stored in any order for each alphabet (A, B, C). Therefore, 30 stations can be stored in total.

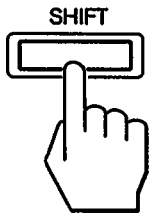
If you cannot store a station successfully
You can store a station only while "MEMORY" is displayed. If the "MEMORY" indicator has gone off, press MEMORY again.

For details on operation, refer to "More information" below.

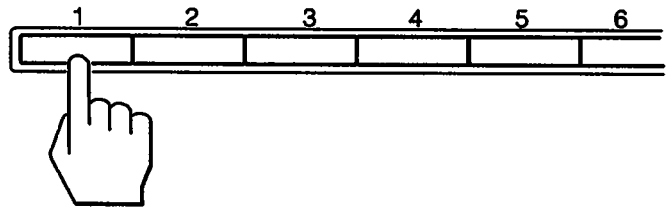
3 Allot one of the following codes:

A-1, A-2,.....A-0
B-1,.....B-0
C-1,.....C-9, C-0

First, select alphabet.



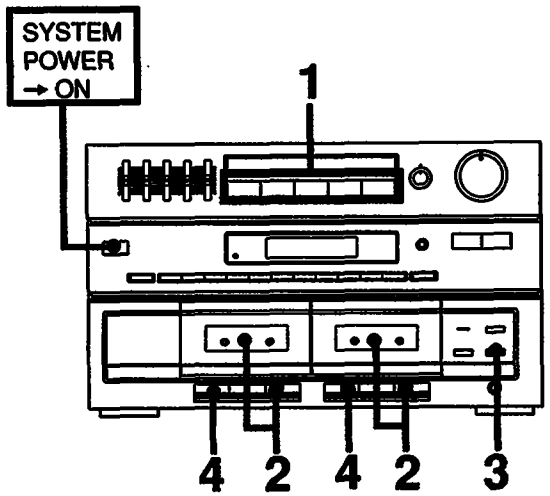
4 Select number.



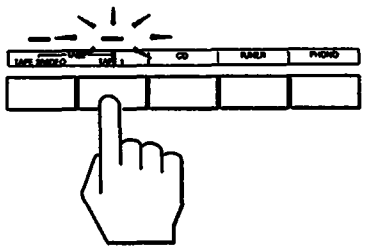
How long does a station remain stored?

- Storing a new station on a used code erases the previously stored one.

Playing Back Tapes (on either Deck A or B)

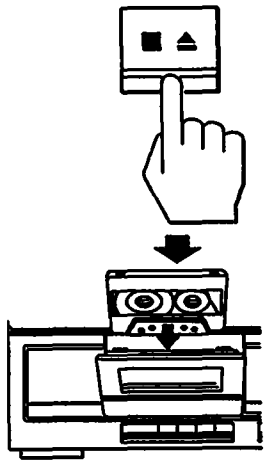


1

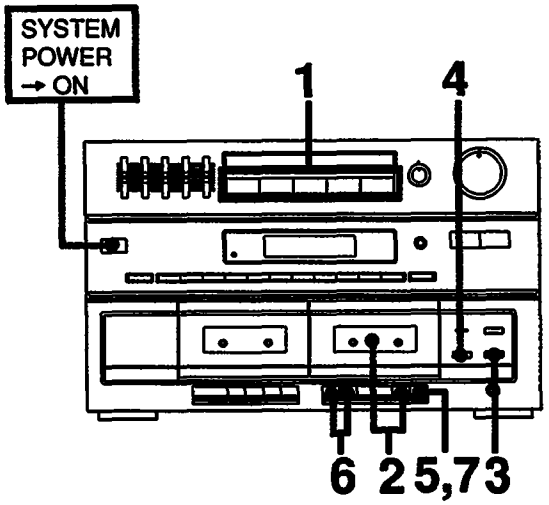


Note
When pressing TAPE button on the remote commander, either TAPE 1 or TAPE 2/VIDEO on which indicator has been lit is selected.

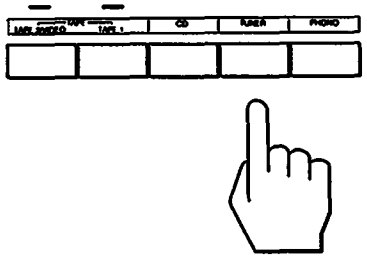
2



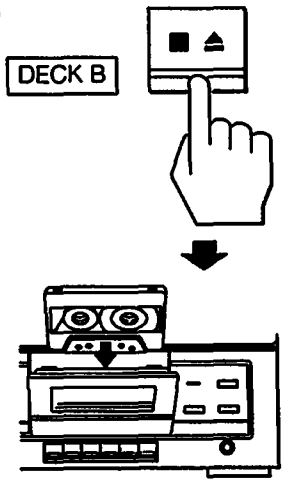
Recording on Tape (Deck B)



1 Select source.



2



More information on playing back tapes

When listening to a tape recorded with Dolby NR*
Set the DOLBY NR switch to ON.

What is the Dolby NR system?
Dolby NR (noise reduction) system reduces tape hiss noise in low-level, high-frequency signals. The system boosts these signals in recording and lowers them in playback.

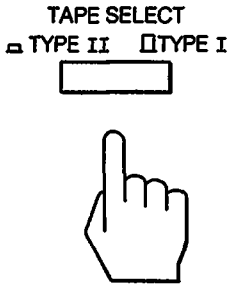
To play back the tapes from Deck B to Deck A
Before playing back the tape in the Deck B, press ▷ and ▮▮ of the Deck A.

To select tape type
The following tapes can be used: TYPE I (NORMAL) and TYPE II (CrO_2).
Set the TAPE SELECT to the appropriate position.

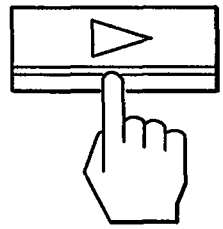
*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

For details on operation, refer to "More information" below.

3 Select the tape type.



4



When the tape ends, the unit will automatically shut off.

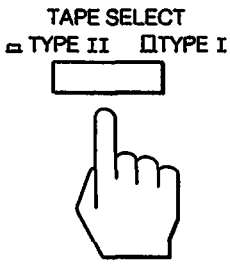
To stop playback, press ■ ⏏.
To pause, press ⏸.
To resume playback, press ⏸ again.

Notes

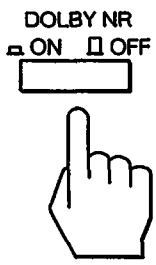
- When both Decks A and B are in the playback mode, only playback from Deck B will be audible.
- During playback or recording mode on a Deck, do not operate the other Deck.
- Before turning the power off, be sure to release ▷ or ● by pressing ■ ⏏. Otherwise, the tape may become entangled when the power is turned on again.

For details on operation, refer to "More information" below.

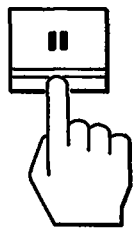
3 Select the tape type.



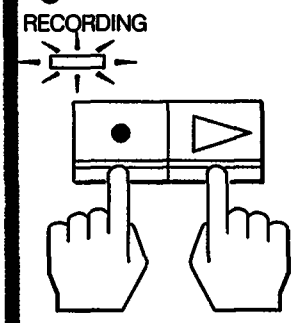
4 Select the DOLBY NR setting.



5



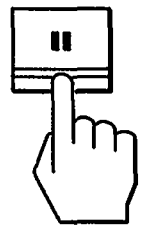
6



Press both buttons together.

Adjust the recording level. See below.

7 Release ⏸ button to begin recording.

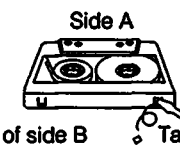
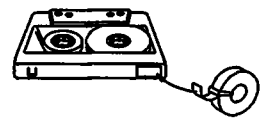


To stop recording, press ■ ⏏.

More information on recording on tape

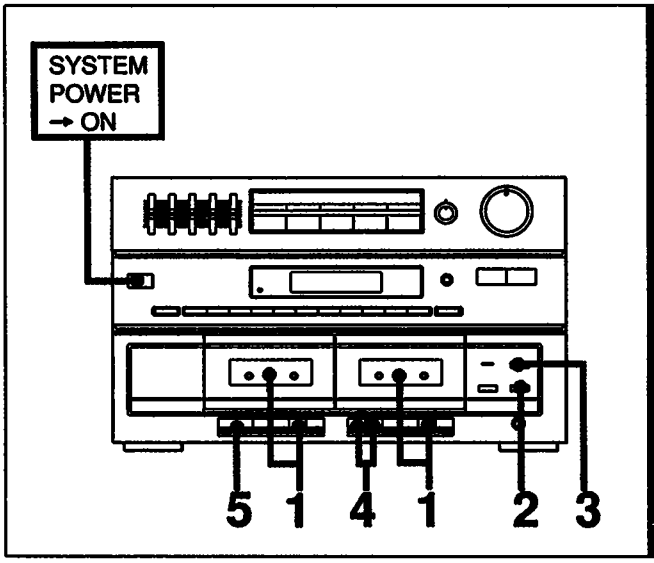
Is it necessary to adjust the recording level?
No, since the recording level is automatically adjusted by the unit during recording.

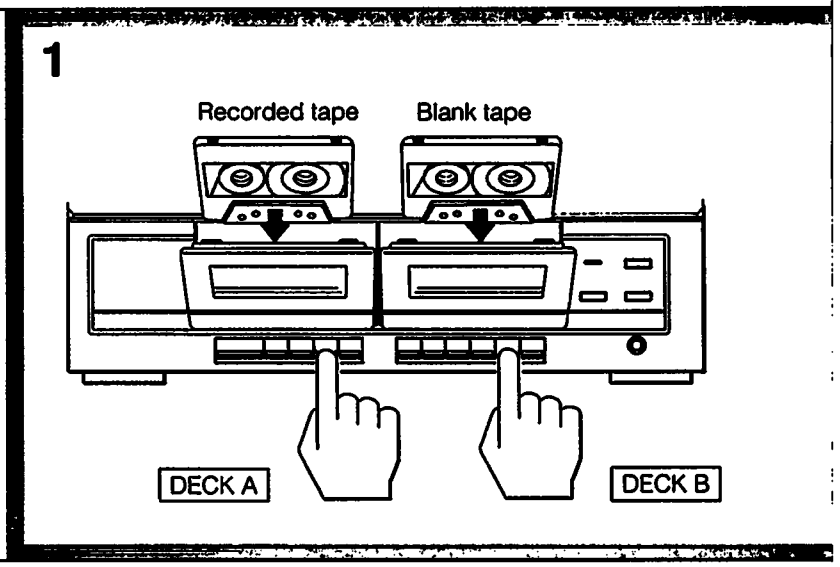
To prevent accidental erasure

To protect side A recording	To reuse a cassette
Break out the tab of side A. 	Cover each slot with plastic tape. 

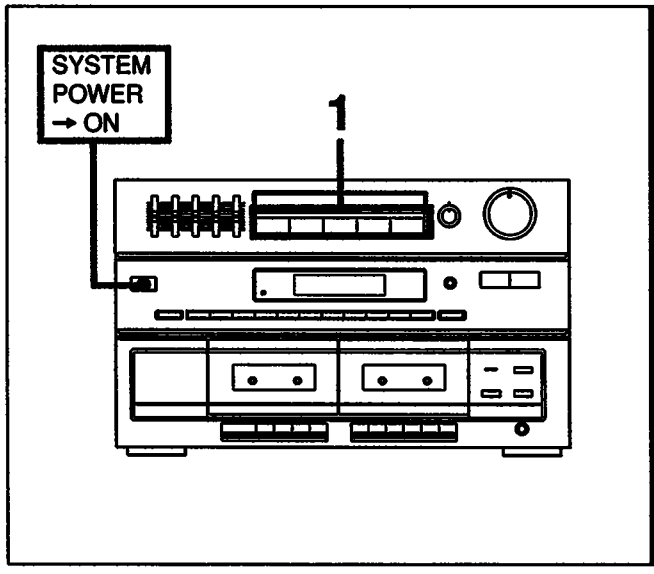
Note on cassette deck
When you are listening to a source other than tape, do not play either cassette deck

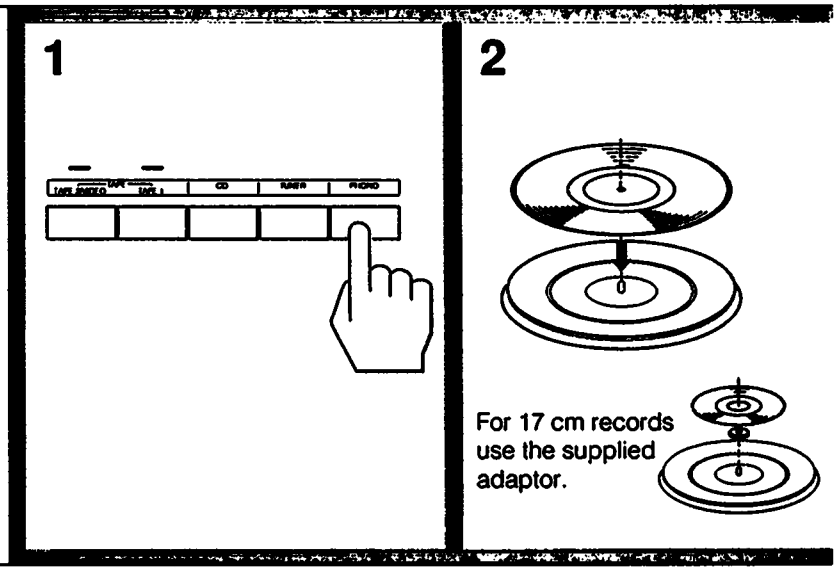
Dubbing Tapes (from Deck A to B)





Playing Records (SEN-211 only)





More information on dubbing tapes

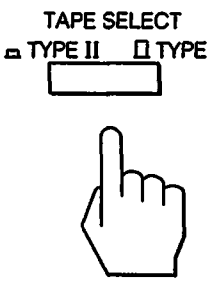
Is it necessary to select DOLBY NR?
No. The tape in Deck B is automatically recorded with the same recording system as the original tape in Deck A.

Notes
- Do not change the setting of the DUBBING SPEED switch during tape dubbing.
- If the sound is affected by a television set during high-speed dubbing, turn off the set or move it away from the unit.

How to edit the tape
1 During normal-speed dubbing, press ⏸ on Deck B.
2 Locate the desired portion to be dubbed with ⏩ or ⏪ on Deck A. Then press ■ ⏏. Or replace the cassette with a new one.
3 Press ▶ on Deck A and release ⏸ on Deck B to start dubbing again.

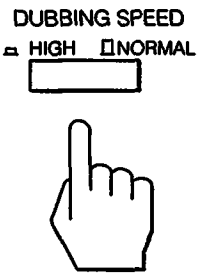
For details on operation, refer to "More information" below.

2 Select the tape type.

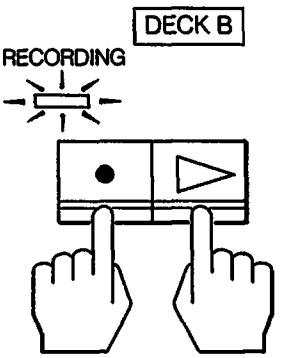


Be sure to use tapes of the same type for dubbing, since the switch setting is effective on both decks.

3 Select the dubbing speed.

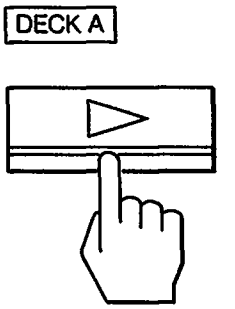


4



Press both buttons together.

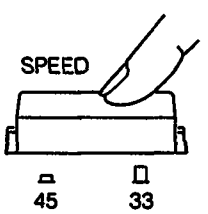
5



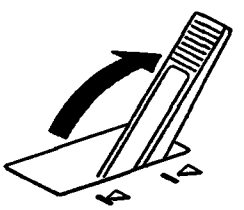
To stop dubbing, press ■ ⏏ on both decks.

For details on operation, refer to "More information" below.

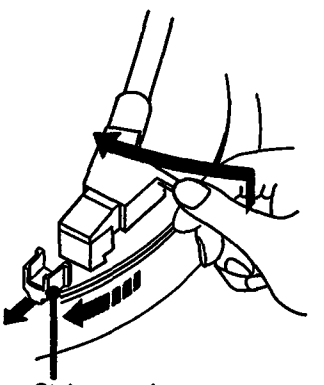
3 Select speed.



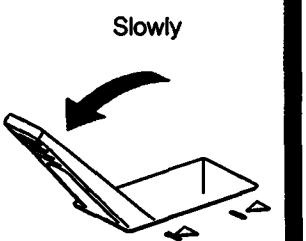
4



5



6



More information on playing records (SEN-211 only)

When the record has finished playing
The tonearm will automatically return to the arm rest.

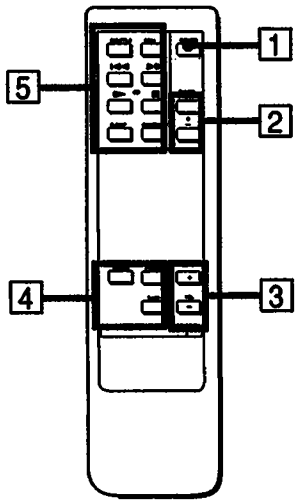
To lift up the stylus during play
Set the cueing lever to ▽.

To stop during play
Press REJECT.

Notes

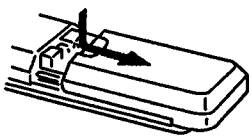
- If the tonearm does not return to the arm rest during initial operation, press the REJECT button. After this, the tonearm will automatically return to the arm rest.
- If you move the tonearm close to the center while the turntable is rotating, the tonearm may return to the arm rest. Do not interfere with this action, as this may damage the automatic return mechanism.

Remote Commander

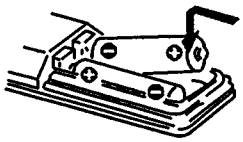


Installing Batteries

1



2 Two size-AA (R6) batteries



Remote Commander

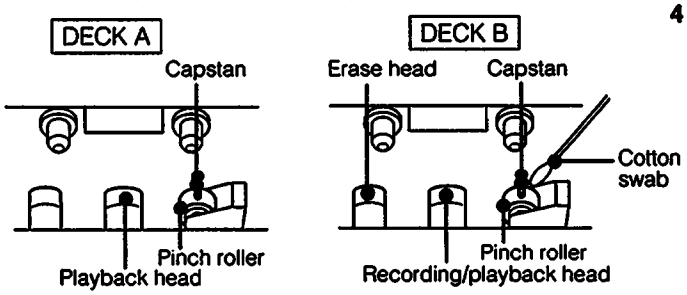
1 POWER button
2 TUNER PRESET +/– buttons
3 VOL (volume) +/– buttons
4 Function selectors
5 CD player operation buttons
CD ►: Selects the CD function and starts CD playback

Battery life
About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries. When the batteries are exhausted, the remote commander can no longer operate the unit. If this happens, replace both batteries with new ones.

To avoid battery leakage
When the commander is not be used for a long time, remove the batteries to avoid damage caused by battery leakage and corrosion.

Maintenance

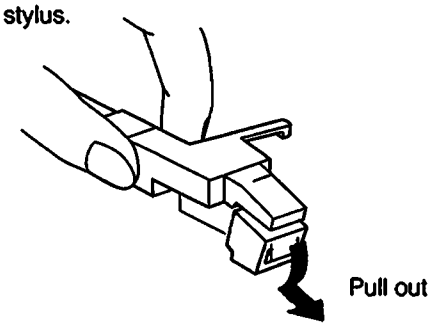
Cleaning the Heads and Tape Path
Clean after every 10 hours of operation and before recording for optimum record/playback quality.
1 Press ■ ⏏.
2 Slightly moisten the tip of a cotton swab with cleaning fluid or alcohol.
3 Wipe heads, pinch rollers and capstans.



Do not insert a cassette until cleaned areas are completely dry.

Demagnetizing the Heads
After 20 to 30 hours of use, it is necessary to remove, residual magnetism built up on the head. Turn off the power and demagnetize heads with any commercially available demagnetizer.

Replacing the Stylus
Replace the stylus after approximately 400 hours of use. An ND-155G replacement stylus is available at your Sony dealer. Handle this delicate stylus with care.
1 Turn off the power of the amplifier.
2 Secure the tonearm to the arm rest.
3 Detach the stylus by grasping it with your fingers.
4 Insert the new stylus.



Cleaning the Cabinet
Clean the cabinet periodically with a soft dry cloth. If the stains are difficult to remove, use a cloth moistened with a mild detergent solution. Do not use solvents such as alcohol, benzine or thinner, since they will damage the finish.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8-ohm loads, both channels driven, from 40 - 20,000 Hz; rated 100 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier

Frequency response
PHONO: RIAA curve
CD, TAPE 2/VIDEO:
10 Hz – 50 kHz ±3 dB

Input

	Sensitivity	Impedance
PHONO	2.5 mV	50 kohms
CD, TAPE 2/VIDEO	250 mV	50 kohms

Output — SPEAKER: Accepts speakers of 8 to 16 ohms
HEADPHONES: Accepts headphones with low and high impedance

GRAPHIC EQUALIZER controls
Boost/Cut range:
±8 dB (100 Hz, 330 Hz, 1 kHz, 3.3kHz)
±6 dB (10 kHz)

Tuner

System — FM stereo, FM/AM superheterodyne tuner
Quartz-locked digital synthesizer system

FM tuner section

Tuning range — 87.5 – 108 MHz
Antenna terminals
75 ohms unbalanced
300 ohms balanced
Intermediate frequency
10.7 MHz
Sensitivity (at 50 dB quieting)
22.1 dBf, 7 µV (mono),
42.1 dBf, 70 µV (stereo)
Usable sensitivity — 19.5 dBf, 5 µV (IHF)
Signal-to noise ratio (at 75 kHz deviation)
80 dB (mono), 75 dB (stereo) at 1 kHz
Separation — 40 dB at 1 kHz
Selectivity — 55 dB at 400 kHz
Harmonic distortion
0.3% (mono), 0.5% (stereo) at 1 kHz

AM tuner section

Tuning range — 530 – 1,710 kHz
Antenna — AM loop antenna, External antenna terminal
Intermediate frequency
450 kHz
Usable sensitivity — AM loop antenna: 500 µV/m (1,000 kHz)
Signal-to-noise ratio
54 dB
Harmonic distortion
0.5%
Selectivity — 38 dB (10 kHz)

Tape Deck

Recording system
4-track 2-channel stereo
Frequency response (DOLBY NR OFF)
With TYPE II cassette (Sony UCX-S)
30 – 14,000 Hz (±3 dB)
With TYPE I cassette (Sony HF-S)
30 – 13,000 Hz (±3 dB)
Wow and flutter — 0.12% WRMS (NAB)

Turntable system PS-LX295 (SEN-211 only)

Platter — 30 cm (12 inches)
Motor — DC servo motor
Drive system — Belt-drive
Speed — 33 1/3 r.p.m., 45 r.p.m.
Automatic system
Return, reject
Tonearm type — Statically balanced
Cartridge type — Moving magnet type
Dimensions — Approx. 430 x 95 x 350 mm (w/h/d)
(17 x 3 3/4 x 13 7/8 inches)
Weight — Approx. 2.5 kg (5 lb 9 oz) net

General

Power requirements
120 V AC, 60 Hz
Power consumption
175 W
Dimensions — Approx. 430 x 277 x 297 mm (w/h/d)
(17 x 11 x 11 3/4 inches)
Weight — Approx. 8.6 kg (18 lb 15 oz) net
Accessories supplied
AM loop antenna (1)
FM wire antenna (1)
Remote Commander RM-S112(1)
Sony batteries SUM 3(NS) (2)
45-rpm adaptor (1)(SEN-211 only)

Design and specifications subject to change without notice.

Troubleshooting

Before going through the check list below, first refer back to the connection and operating procedures.
Should any problem persist after you have made these checks, consult your nearest Sony dealer.

Tuner Operation	
STEREO indicator blinks.	• Adjust the antenna.
Severe hum or noise.	• The signal strength is too weak. Connect an external antenna. • Adjust the antenna. • Connect the ground wire.

Cassette Deck Operation	
● button does not activate.	• No cassette in the cassette holder. • The tab has been removed from the cassette. (See page 11.)
Function buttons do not activate.	• Cassette holder is not fully closed.
Recording or playback cannot be made, or there is decrease in sound level.	• Recording/playback and erase heads are either dirty or magnetized. Clean or demagnetize the heads. (See page 14.)
Excessive wow, flutter or dropout.	• Capstan or pinch roller is dirty. (See page 14.)
Incomplete erasure.	• Erase head is dirty. (See page 14.)
Unbalanced tone in high frequencies.	• Improper setting of the DOLBY NR switch. When playing back, set the switch to the same position used in recording. • Improper setting of the TAPE SELECT switch. (See page 10.)

Turntable Operation (SEN-211 only)	
Tonearm skips, skates or does not advance.	• Turntable is not level. Relocate player to a level surface. • Clean record with commercially available record cleaning kit. • Replace defective record.
Poor tone quality.	• Remove dust on stylus by blowing, or with stylus cleaning brush. • Replace worn stylus. (See page 14.)
Ramble or low-frequency howl*.	• Relocate turntable to a steady level surface. • Relocate turntable or speakers.

* This is called "acoustic feedback" and is caused when vibrations from the speakers are transmitted through the air or via a solid objects (such as the shelves, the cabinet, the floor, etc.) to the turntable, where they are picked up by the stylus, amplified and reproduced through the speakers once again.

General	
The unit is not turn on.	• Check if any button on the front panel has been pressed before turning on the SYSTEM POWER switch.
No audio.	• Check the power cord connection. • Check the connections. (See pages 4 to 5.)
No audio from one channel.	• Adjust the BALANCE control. • Check the speaker cord or connecting cord connection. (See page 5.)
Noise when TV is turned on.	• Move the TV away from the audio system.
Lack of bass sound or obscure instrument position.	• Check the connection between the amplifier and speakers.

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